

SECRET

CIA/RR GB 64-15
May 1964

CLIMATIC DATA
FOR FOUR SOVIET BIOLOGICAL WARFARE SITES

In this report data on temperature, precipitation, and winds are presented in tabular form for four probable biological-warfare sites in the USSR: Ashkhabad, Lisiy Island, Otar, and Semipalatinsk. Data for another probable BW site, Ostrov Vozrozhdeniya, are contained in CIA/RR GP 62-57:L, dated March 1962.

The climatic data are from [REDACTED] and appear to have been based on long periods of observations. The exact number of years was not specified.

SECRET

GROUP 1
Excluded from automatic
downgrading and
declassification

SECRETI. Ashkhabad (37°57'N-58°23'E)

Table 1

Temperature

	<u>Average</u>	<u>Average Daily Minimum</u>	<u>Degrees Fahrenheit</u>	
			<u>Absolute Maximum</u>	<u>Absolute Minimum</u>
January	33.1	27.1	77.0	-9.4
February	38.8	31.3	82.4	-14.8
March	48.9	39.9	96.8	6.8
April	61.3	49.6	98.6	24.8
May	73.8	59.0	109.4	39.2
June	82.2	69.1	109.4	46.4
July	86.7	73.8	118.4	55.4
August	83.8	69.1	114.8	51.8
September	73.8	58.8	107.6	37.4
October	59.9	48.2	100.4	23.0
November	47.5	38.1	93.2	3.2
December	38.3	30.9	80.6	-9.4

Absolute minimum temperature: -14.8

Absolute maximum temperature: 118.4

Average daily temperature exceeds:

32.0	--	entire year	(365 days)
41.0	--	21 February to 8 December	(290 days)
50.0	--	18 March to 10 November	(237 days)
59.0	--	11 April to 20 October	(192 days)
68.0	--	29 April to 2 October	(156 days)
77.0	--	23 May to 10 September	(110 days)
86.0	--	4 July to 8 August	(35 days)

SECRET

SECRET

Table 2
Precipitation

	<u>Average (Inches)</u>	<u>Maximum (Inches)</u>	<u>Minimum (Inches)</u>	<u>Number of Days With Thunderstorms</u>
January	0.9	2.0	0.1	0
February	1.3	2.4	0.1	0.4
March	1.7	4.9	0.1	1.0
April	1.5	5.0	0	4.0
May	1.0	2.8	0.1	6.0
June	0.4	2.0	0	4.0
July	0.2	1.3	0	2.0
August	0.1	1.1	0	1.0
September	0.1	0.5	0	0.6
October	0.4	2.1	0	0.9
November	0.7	2.8	0	0
December	0.6	1.9	0	0

Average annual precipitation: 8.9 inches

Maximum daily precipitation: 2.2 inches

Average number of days per year with snow cover: 18

Average date of first snow cover: 17 December

Average date of disappearance of snow cover: 17 February

Average maximum depth of snow cover (based on 10-day period of greatest depth): 1.6 inches

SECRET

SECRET

Table 3
Direction, Frequency, and Velocity of Wind

Direction	January		July	
	Frequency (Percent)	Velocity (Miles per Hour)	Frequency (Percent)	Velocity (Miles per Hour)
N	19	4.3	39	6.7
NE	10	5.4	7	8.3
E	30	6.3	11	7.8
SE	22	4.9	9	4.9
S	5	3.6	7	1.8
SW	2	3.6	5	3.4
W	3	6.5	7	8.3
NW	9	7.2	15	8.1

- 4 -

SECRET

SECRET

Table 4
Wind Velocity

		Miles per Hour							
		Average							
		Direction							
	Overall	N	NE	E	SE	S	SW	W	NW
January	3.8	4.3	5.4	6.3	4.9	3.6	3.6	6.5	7.2
February	4.9	6.0	6.0	6.7	5.1	3.6	3.6	8.3	8.6
March	4.9	5.1	5.4	6.9	5.6	3.6	5.4	6.5	9.0
April	5.1	6.7	6.0	8.1	6.5	2.5	4.9	7.6	8.3
May	5.4	6.3	8.3	9.2	6.7	4.9	4.7	7.2	8.3
June	5.8	8.6	7.8	8.1	6.0	2.0	5.1	7.8	8.7
July	5.4	6.7	8.3	7.8	4.9	1.8	3.4	8.3	8.1
August	5.1	6.9	8.7	8.7	5.1	2.5	4.9	9.0	7.8
September	4.5	5.4	6.3	8.6	5.6	2.2	4.5	5.8	7.8
October	4.3	5.6	5.8	7.4	4.9	2.7	3.1	5.8	8.3
November	3.8	5.1	4.9	6.5	4.5	2.0	2.7	7.2	7.4
December	5.8	5.4	5.4	6.0	4.9	2.5	6.3	6.7	6.5
Annual	4.7	6.0	6.5	7.6	5.4	2.9	4.3	7.2	8.1

Percent of observations that were calms: January -- 28; July -- 13

SECRET

SECRET

II. Lisy Island a/ (57°35'05"N-34°24'25"E)

Table 1

Temperature

	Degrees Fahrenheit
	<u>Average</u>
January	14.9
February	15.8
March	23.9
April	38.1
May	52.2
June	58.6
July	63.3
August	59.2
September	50.0
October	38.8
November	28.0
December	18.7

Absolute minimum temperature: -54

Absolute maximum temperature: 93.2

Period when average daily temperature
is less than 32: 4 November to
4 April (149 days)

a. Climatic data are not available for Lisy Island; therefore, data for Vysniy Volochek (57°35'N-34°34'E), 5 miles to the east, have been substituted.

SECRET

SECRET

Table 2
Precipitation

	<u>Inches</u> <u>Average</u>
January	1.4
February	1.3
March	0.9
April	1.0
May	2.2
June	3.0
July	3.3
August	3.1
September	2.4
October	2.0
November	1.2
December	1.4

Average annual precipitation: 23.2 inches

Average number of days per year with snow
cover: 149

Average date of first snow cover: 27 October

Average date of disappearance of snow cover:
20 April

Average maximum depth of snow cover (based on
10-day period of greatest depth): 19.7 inches

- 7 -

SECRET

SECRET

Table 5
Direction, Frequency, and Velocity of Wind

<u>Direction</u>	<u>January</u>		<u>July</u>	
	<u>Frequency (Percent)</u>	<u>Velocity (Miles per Hour)</u>	<u>Frequency (Percent)</u>	<u>Velocity (Miles per Hour)</u>
N	7	6.6	10	5.8
NE	4	6.5	10	5.1
E	5	5.4	7	5.4
SE	20	7.8	15	6.0
S	22	7.8	11	6.5
SW	17	6.6	17	6.0
W	15	8.7	16	6.9
NW	10	8.5	14	5.8

Percent of observations that were calms: January -- 28; July -- 13

- 8 -

SECRET

SECRET

III. Otar (43°32'N-75°12'E)

Table 1

Temperature

	<u>Degrees Fahrenheit</u>
	<u>Average</u>
January	14.4
February	18.7
March	34.5
April	49.6
May	60.6
June	71.1
July	74.8
August	72.9
September	61.0
October	46.6
November	33.3
December	19.9

Absolute minimum temperature: -38.2

Absolute maximum temperature: 109.4

Period when average daily temperature
is less than 32: 15 November to
11 March (116 days)

SECRET

SECRET

Table 2

Precipitation

Monthly precipitation data are not available.

Average annual precipitation: 10.7 inches

Average number of days per year with snow cover: 90

Average date of first snow cover: 17 November

Average date of disappearance of snow cover: 25 March

Average maximum depth of snow cover (based on 10-day period of greatest depth): 5.5 inches

SECRET

SECRET

Table 3
Direction, Frequency, and Velocity of Wind

<u>Direction</u>	<u>January</u>		<u>July</u>	
	<u>Frequency (Percent)</u>	<u>Velocity (Miles per Hour)</u>	<u>Frequency (Percent)</u>	<u>Velocity (Miles per Hour)</u>
N	8	3.8	11	6.9
NE	9	4.5	15	7.4
E	55	4.7	16	7.4
SE	8	5.1	7	5.8
S	2	2.7	4	4.7
SW	6	9.0	16	9.4
W	24	7.4	20	8.4
NW	10	5.4	11	6.9

Percent of observations that were calms: January -- 55; July -- 24

SECRET

SECRET

IV. Semipalatinsk (50°28'N-80°13'E)

Table 1

Temperature

	Degrees Fahrenheit
	<u>Average</u>
January	3.0
February	3.9
March	16.0
April	38.8
May	57.0
June	69.6
July	71.8
August	67.8
September	55.8
October	40.6
November	21.0
December	7.7

Absolute minimum temperature: -56.2

Absolute maximum temperature: 107.6

Average daily temperature exceeds:

32	--	6 April to 28 October	(205 days)
41	--	18 April to 13 October	(178 days)
50	--	1 May to 27 September	(149 days)
59	--	19 May to 9 September	(113 days)

SECRET

SECRET

Table 2
Precipitation

	Average (Inches)	Maximum Daily (Inches) as Observed in Period of			Maximum (Inches)	Minimum (Inches)	Number of Days With Thunderstorms
		1 Year	10 Years	20 Years			
January	.6	.2	.5	.6	2.0	0.1	0
February	.5	.2	.4	.5	1.3	0	0
March	.6	.2	.4	.5	2.2	0	0
April	.6	.3	.6	.7	1.8	0	0.5
May	.9	.5	.8	.9	3.2	0	2.0
June	1.3	.5	1.1	1.4	3.6	0.1	5.0
July	1.4	.5	1.2	1.4	4.7	0	6.0
August	.9	.4	.8	.9	2.7	0	5.0
September	.8	.3	.8	.9	2.1	0.1	0.7
October	1.0	.3	.7	.8	2.5	0	0.1
November	1.0	.3	.9	1.1	3.0	0.1	0
December	.8	.2	.5	.5	2.0	0.1	0

Average annual precipitation: 10.5 inches

Maximum daily precipitation: 1.5 inches

Average number of days per year with snow
cover: 147 days

Average date of first snow cover: 24 October

Average date of disappearance of snow cover:
8 AprilAverage maximum depth of snow cover (based
on 10-day period of greatest depth):
11.8 inches

- 15 -

SECRET

SECRET

Table 5
Direction, Frequency, and Velocity of Wind

Direction	January		July	
	Frequency (Percent)	Velocity (Miles per Hour)	Frequency (Percent)	Velocity (Miles per Hour)
N	1	5.1	20	7.8
NE	4	7.4	15	7.6
E	38	7.8	14	6.0
SE	16	9.2	4	6.7
S	9	10.7	3	6.5
SW	16	11.0	8	10.7
W	12	6.7	18	9.2
NW	4	7.4	18	7.6

SECRET

SECRET

Table 4

Wind Velocity

	<u>Miles per Hour</u> <u>Average</u>
January	9.2
February	8.5
March	9.4
April	9.0
May	8.3
June	7.6
July	6.9
August	6.5
September	7.2
October	8.1
November	9.9
December	9.0
Annual	8.3

Percent of observations that were calms:
January -- 7; July -- 1

SECRET

SECRET

Title of Report CLIMATIC DATA FOR FOUR SOVIET BIOLOGICAL WARFARE SITES Date May 1964
Report No. CIA/RR GB 64-15 PN 64.1726 B Classification/ SECRET
Requester [REDACTED] ABCD/OSI
Analyst/Branch [REDACTED] GG/S Graphics None

25X1A 25X1A

Copy No.	To	Date
1 and 2	Requester	14 May 1964
3	Ch/G	
4	GG/S	
5	St/P/G	
6		
7	D/GG	

Remarks:

SECRET

GROUP 1
Excluded from automatic
downgrading and
declassification